

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P966681

Luminaire Tested: **NAV-SB4C-735-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24128.5 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



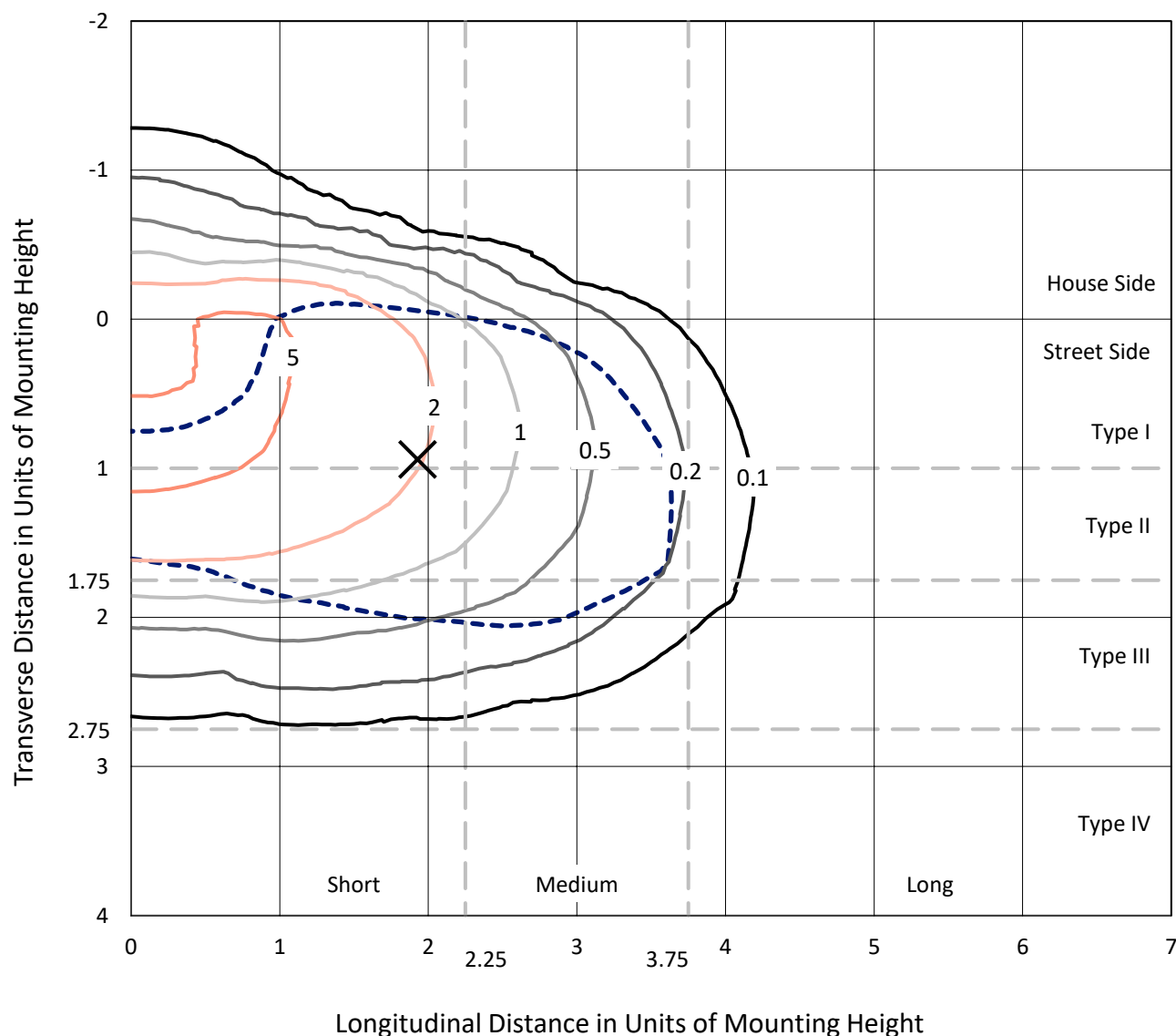
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



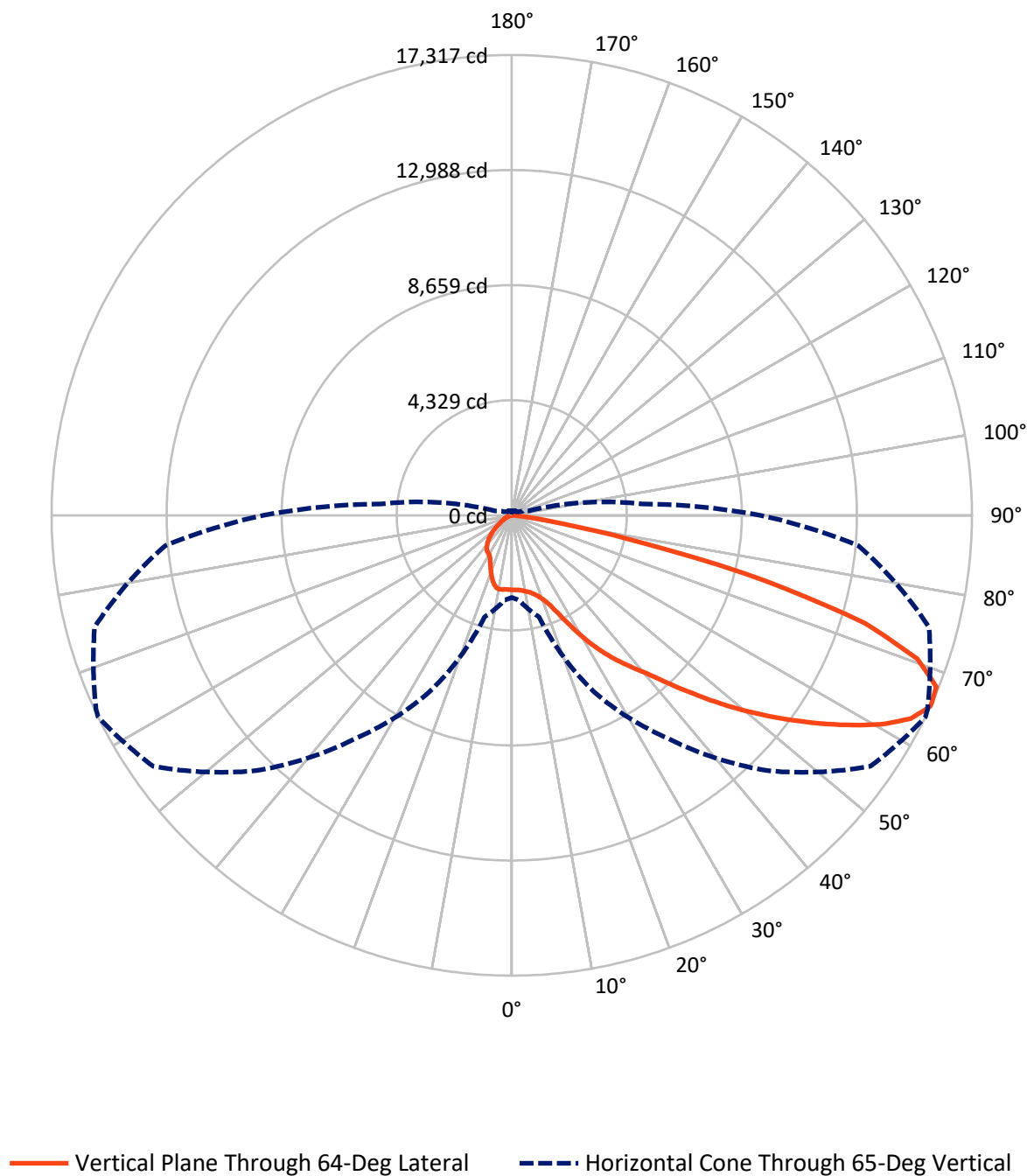
Based on 25 foot mounting height. Maximum calculated value = 7.1 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3226.7	0.0	3226.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	20901.8	0.0	20901.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	24128.5	0.0	24128.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.9	1.1
10°-20°	702.3	2.9
20°-30°	1330.7	5.5
30°-40°	2692.8	11.2
40°-50°	4587.1	19.0
50°-60°	6238.1	25.9
60°-70°	5857.9	24.3
70°-80°	2346.9	9.7
80°-90°	113.7	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	24128.5	100.0
0°-180°	24128.5	100.0

Coefficient of Utilization



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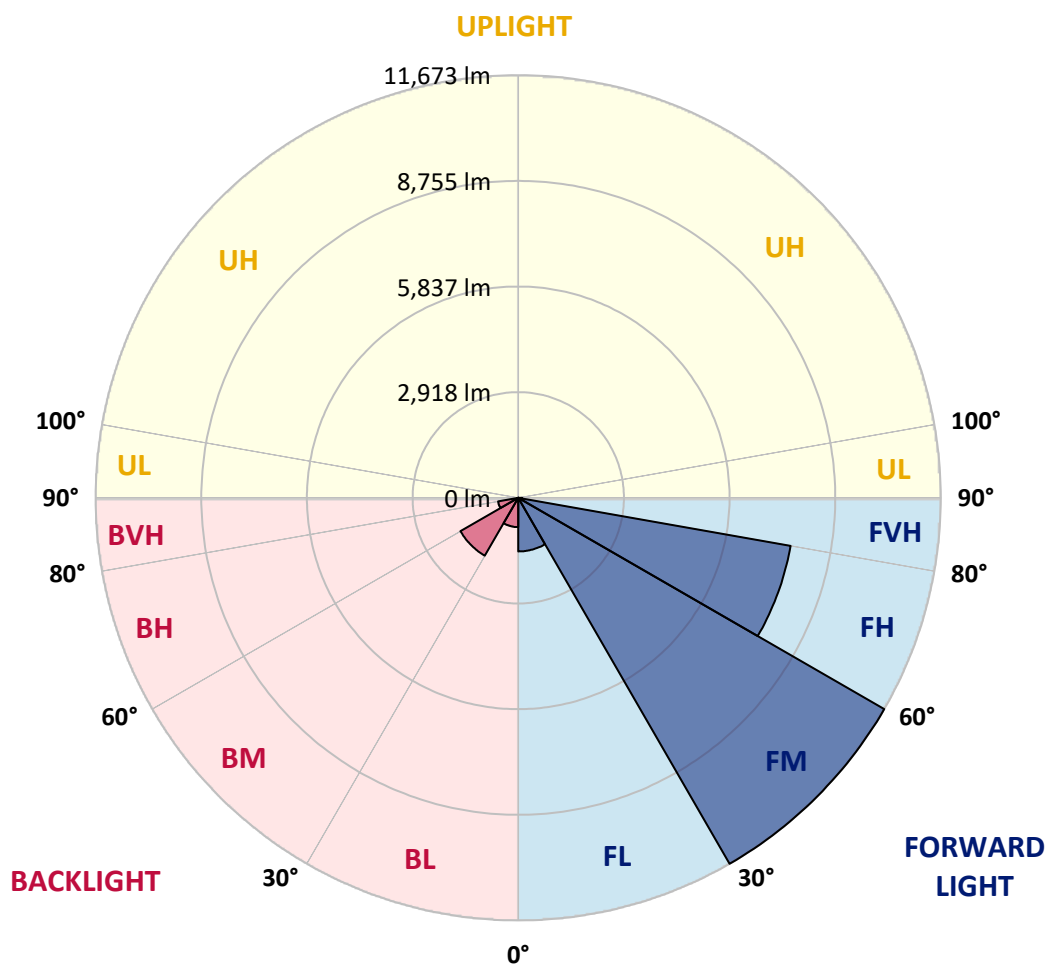
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1481.8	6.1			
FM	(30°-60°)	11673.3	48.4			
FH	(60°-80°)	7638.5	31.7			G4/12000
FVH	(80°-90°)	108.1	0.4			G2/225
BL	(0°-30°)	810.1	3.4	B2/1000		
BM	(30°-60°)	1844.7	7.6	B2/2500		
BH	(60°-80°)	566.3	2.3	B2/1000		G2/1000
BVH	(80°-90°)	5.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3
2.5°	2796.7	2816.1	2811.3	2806.3	2804.8	2808.0	2809.6	2808.0	2808.0	2808.0	2809.6
5°	2743.3	2759.5	2759.5	2770.8	2787.0	2806.3	2820.9	2824.2	2827.5	2832.3	2830.6
7.5°	2641.4	2654.3	2664.1	2701.3	2741.7	2793.4	2837.1	2859.7	2863.0	2880.8	2887.2
10°	2571.8	2588.0	2604.2	2643.1	2701.3	2778.9	2853.3	2908.3	2916.4	2958.5	2977.8
12.5°	2568.6	2584.8	2605.9	2647.9	2715.8	2798.4	2888.9	2968.2	2982.7	3044.1	3084.6
15°	2602.6	2622.0	2641.4	2693.2	2766.0	2866.2	2963.3	3062.0	3076.5	3163.9	3207.5
17.5°	2672.2	2698.0	2712.6	2764.3	2842.0	2953.6	3081.4	3194.6	3207.5	3309.4	3364.5
20°	2809.6	2840.4	2845.2	2887.2	2963.3	3083.0	3235.0	3375.7	3391.9	3508.4	3569.9
22.5°	3094.3	3138.0	3099.2	3120.2	3188.2	3307.8	3472.8	3650.7	3673.4	3806.0	3861.0
25°	3595.7	3657.2	3557.0	3521.4	3550.5	3675.0	3882.1	4106.9	4132.8	4239.5	4267.0
27.5°	4580.8	4501.6	4349.5	4200.7	4113.3	4184.6	4417.4	4695.6	4728.0	4831.5	4799.2
30°	5662.9	5593.4	5387.9	5058.0	4850.9	4839.6	5054.8	5365.3	5402.5	5501.2	5402.5
32.5°	6746.7	6680.3	6457.1	6051.1	5692.0	5514.1	5662.9	6007.4	6026.9	6089.9	5944.4
35°	7812.7	7744.7	7521.4	7105.7	6664.1	6259.8	6230.7	6618.9	6625.4	6691.7	6474.9
37.5°	8885.0	8828.4	8590.6	8183.0	7747.9	7189.9	6919.8	7198.0	7206.1	7270.7	7046.0
40°	9650.1	9674.4	9511.0	9195.6	8822.0	8212.1	7692.9	7814.2	7765.7	7874.0	7739.9
42.5°	10306.8	10355.4	10213.0	10054.5	9837.7	9300.7	8650.5	8629.5	8551.8	8610.1	8470.9
45°	10874.5	10915.0	10787.2	10750.0	10745.2	10368.3	9697.0	9570.8	9462.5	9451.1	9284.6
47.5°	11083.2	11160.9	11215.9	11340.4	11583.0	11424.5	10779.1	10583.4	10462.1	10373.1	10109.5
50°	11162.5	11245.0	11432.6	11795.0	12369.2	12437.1	11856.4	11636.4	11487.6	11325.8	10937.7
52.5°	11055.8	11202.9	11455.3	12065.1	12898.1	13249.0	12890.0	12697.5	12527.7	12264.0	11688.2
55°	10426.5	10573.7	11089.7	12061.8	13161.7	13818.4	13867.0	13781.2	13590.4	13174.7	12294.8
57.5°	9100.2	9318.5	10135.4	11651.0	13156.9	14308.6	14824.6	14886.1	14672.5	14077.2	12771.9
60°	7262.6	7558.7	8555.1	10740.4	12750.9	14573.9	15664.0	15971.3	15744.9	14966.9	13158.5
62.5°	5067.7	5410.6	6353.6	9313.7	11822.5	14383.0	16277.1	16844.8	16673.4	15762.8	13307.4
65°	3091.1	3201.1	3961.3	7329.0	10243.7	13583.9	16466.3	17317.2	17260.6	16249.6	13087.3
67.5°	2059.1	2151.3	2369.7	5025.7	7951.7	11987.5	16013.5	17234.7	17250.9	16170.3	12281.9
70°	1240.7	1319.9	1462.3	2922.9	5153.4	9488.3	14611.1	16183.3	16277.1	15110.9	10754.9
72.5°	511.2	564.5	693.9	1324.7	2668.9	6022.0	11634.8	13894.5	14112.8	12705.6	8254.2
75°	289.6	317.0	407.6	664.8	1158.1	2806.3	7047.5	9863.7	10185.5	8757.3	4965.8
77.5°	192.5	205.4	263.6	430.3	651.9	957.6	3011.9	5138.8	5753.5	4783.0	2149.7
80°	129.4	140.7	181.1	287.9	423.8	410.8	959.2	1903.8	2342.1	1643.4	524.1
82.5°	87.3	89.0	129.4	189.2	268.5	199.0	283.1	592.0	744.0	475.6	199.0
85°	50.1	48.5	95.4	110.0	119.7	82.5	85.7	177.9	232.9	200.6	113.3
87.5°	6.5	9.7	37.2	29.1	16.2	17.8	17.8	30.7	45.3	48.5	24.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3	2806.3
2.5°	2809.6	2808.0	2803.2	2798.4	2787.0	2780.5	2783.8	2780.5	2778.9	2780.5	2787.0
5°	2830.6	2825.8	2812.9	2796.7	2774.1	2746.6	2728.8	2702.9	2678.6	2664.1	2667.3
7.5°	2887.2	2882.4	2864.7	2819.4	2746.6	2631.7	2526.5	2434.4	2364.8	2324.4	2326.0
10°	2977.8	2969.7	2942.3	2842.0	2651.2	2400.4	2191.8	2018.6	1905.5	1852.1	1847.3
12.5°	3084.6	3074.9	3026.4	2820.9	2469.9	2078.5	1790.6	1598.1	1493.0	1446.1	1441.3
15°	3210.8	3197.8	3102.4	2720.7	2206.3	1722.6	1459.0	1315.1	1247.1	1205.1	1206.6
17.5°	3367.6	3345.0	3159.0	2570.2	1920.0	1450.9	1255.2	1146.8	1087.0	1046.5	1043.3
20°	3571.5	3534.3	3204.4	2390.7	1656.3	1279.5	1117.7	1027.2	981.8	946.3	939.8
22.5°	3856.2	3802.7	3259.3	2196.6	1470.4	1161.4	1015.8	949.5	912.2	871.9	865.4
25°	4208.8	4145.7	3327.3	2017.0	1342.5	1059.4	941.4	886.4	842.8	795.8	791.0
27.5°	4702.1	4588.9	3408.1	1869.8	1232.6	972.1	873.5	812.0	761.9	723.0	714.9
30°	5252.1	5066.1	3479.3	1780.9	1132.2	891.2	784.5	723.0	676.1	648.6	643.8
32.5°	5772.9	5520.5	3526.2	1742.1	1041.7	799.1	687.5	621.2	585.6	577.5	582.3
35°	6264.7	5931.5	3521.4	1704.9	960.8	706.8	592.0	524.1	496.6	501.4	501.4
37.5°	6830.8	6369.8	3487.4	1646.7	894.5	622.8	509.5	449.7	425.4	427.0	433.5
40°	7489.2	6876.1	3466.3	1536.7	821.7	545.1	441.6	393.1	375.3	368.8	367.2
42.5°	8191.1	7366.2	3469.6	1412.1	731.1	475.6	394.6	354.2	338.0	333.2	331.6
45°	8896.4	7833.7	3474.4	1282.7	635.7	422.2	360.7	326.8	317.0	310.6	310.6
47.5°	9559.6	8231.6	3383.8	1143.6	541.9	381.7	333.2	310.6	302.5	294.4	294.4
50°	10177.4	8496.8	3165.5	981.8	467.5	349.4	312.2	296.0	287.9	279.8	279.8
52.5°	10657.8	8538.9	2804.8	815.2	415.7	325.1	299.2	284.6	275.0	266.9	265.3
55°	10871.4	8275.2	2292.0	660.0	375.3	304.1	286.3	271.7	260.5	252.4	250.7
57.5°	10816.3	7720.4	1787.4	530.5	336.4	283.1	270.1	260.5	247.4	234.5	232.9
60°	10546.2	6978.0	1347.4	441.6	300.8	260.5	252.4	244.3	226.4	207.0	203.8
62.5°	10078.7	6044.6	960.8	365.5	262.0	234.5	231.3	224.9	199.0	163.4	160.1
65°	9363.8	4910.8	647.0	304.1	224.9	205.4	207.0	195.7	161.7	121.4	118.1
67.5°	8318.9	3590.9	414.1	249.1	187.7	171.5	173.1	166.6	137.5	103.5	98.7
70°	6987.6	2377.8	270.1	189.2	150.5	132.6	142.4	143.9	116.4	84.2	80.9
72.5°	5122.6	1404.0	189.2	140.7	110.0	92.1	116.4	119.7	93.8	63.0	59.9
75°	2919.6	666.5	142.4	101.9	68.0	64.7	90.6	90.6	64.7	42.0	38.8
77.5°	1226.1	278.2	100.2	66.3	38.8	37.2	61.5	56.6	32.4	19.4	19.4
80°	354.2	124.5	53.4	32.4	16.2	14.6	24.3	17.8	8.1	3.3	3.3
82.5°	139.1	55.0	21.0	12.9	6.5	6.5	3.3	0.0	0.0	0.0	0.0
85°	82.5	22.7	9.7	4.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	21.0	4.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)